

CONFIRMATION OF ACCEPTANCE

The attached document is the interim sharing arrangement between the Federal Communications Commission and the Department of Industry (Industry Canada) concerning the use of the frequency bands 2305-2320 MHz and 2345-2360 MHz by stations in the Wireless Communications Service (WCS) near the Canada/United States of America border. The Federal Communications Commission and Industry Canada intend to implement provisionally the attached arrangement, to the extent permissible under their respective domestic laws, until superseded by a replacement for the *Agreement Concerning the Coordination and Use of Radio Frequencies Above Thirty Megacycles per Second, with Annex, as amended*¹, or other relevant agreements.

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Date: January 31, 2003

Date: June 25, 2003

¹ Exchange of Notes at Ottawa, Canada, October 24, 1962. Entered into force October 24, 1962. See USA: *Treaties and Other International Acts Series* TIAS 5205; CAN: *Canada Treaty Series* (CTS) 1962 No. 15. *Agreement revising the technical annex to the Agreement of October 24, 1962* (TIAS 5205 / CTS 1962 No. 15). Effected by exchange of Notes at Ottawa, Canada, June 16 and 24, 1965. Entered into Force June 24, 1965. USA: TIAS 5833/CAN: CTS 1962 No. 15, as amended June 24, 1965.

Interim Arrangement Concerning the Use of the Frequency Bands 2305 – 2320 MHz and 2345 – 2360 MHz By Stations in the Wireless Communications Service (WCS) Near the Canada/United States of America Border

1. Scope

- 1.1 This interim arrangement (Arrangement) between the Federal Communications Commission (FCC) of the United States of America (U.S.) and the Department of Industry (Industry Canada) of Canada (jointly, the Administrations) concerns the use of the frequency bands 2305 – 2320 MHz and 2345 – 2360 MHz by WCS systems within 120 km of the Canada/United States of America Border. This Arrangement applies to stations of WCS in the fixed and mobile (except aeronautical) services; it does not apply to the digital audio radio service (DARS) by satellite nor its terrestrial repeater applications.
- 1.2 This Arrangement will be applied provisionally until superceded by a replacement for the *Agreement Concerning the Coordination and Use of Radio Frequencies Above Thirty Megacycles per Second, with Annex, as amended*² or other relevant agreements.
- 1.3 This Arrangement is subject to review at any time at the request of either Administration.

2. General Principles

- 2.1 The bands 2305-2320 MHz and 2345-2360 MHz are to be shared on an equal basis along the border and, to the extent possible, both Administrations shall have full use of these frequencies or sub-bands for the provision of WCS within their respective countries.
- 2.2 Coordination shall be carried out by the WCS licensees for their respective service areas on both sides of the border.
- 2.3 Licensees are encouraged to enter into mutually acceptable sharing agreements that will facilitate reasonable and timely development of their systems. These agreements should allow for the provision of services by each licensee within its licensed service area to the maximum extent possible and provide for the basis of coordination in the border area.
- 2.4 Licensees are expected to take full advantage of interference mitigation techniques such as antenna directivity, polarization, frequency offset, shielding, site selection and/or power control to facilitate the coordination of systems.

² Exchange of Notes at Ottawa, Canada, October 24, 1962. Entered into force October 24, 1962. See USA: *Treaties and Other International Acts Series* TIAS 5205; CAN: *Canada Treaty Series* (CTS) 1962 No. 15. *Agreement revising the technical annex to the Agreement of October 24, 1962 (TIAS 5205 / CTS 1962 No. 15)*. Effected by exchange of Notes at Ottawa, Canada, June 16 and 24, 1965. Entered into force June 24, 1965. USA: TIAS 5833/CAN: CTS 1962 No. 15, as amended June 24, 1965.

- 2.5 All data and calculations used in determining compliance with this Arrangement and/or licensee sharing agreements shall be retained by the licensees and be made available to the Administrations upon request.
- 2.6 If a license is transferred, assigned or reissued, any existing agreement that formed the basis of coordination in the border area shall continue to apply with respect to the new licensee unless a new agreement is reached.
- 2.7 When licensees are unable to conclude mutually acceptable sharing arrangements, Section 3 of this Arrangement will apply.

3. Cross-Border Coordination Between Licensed WCS Operators

- 3.1 The stations that are to be considered for coordination under this section of this Arrangement are the base stations (central transmitting stations) and their associated subscriber stations, and shall be referred to jointly as WCS systems. Additional coordination is required with respect to specified fixed microwave stations pursuant to Section 4 of this Arrangement.
- 3.2 Coordination of a WCS station is required if:
 - (a) it is located at a distance less than 120 km from the U.S./Canada border; and
 - (b) it would produce at ground level in the other country's territory a power flux-density (pfd) level greater than $-110 \text{ dB(W/m}^2\text{)}$ in any 1 MHz bandwidth.³
- 3.3 When coordination is required, the following procedures shall apply:
 - 3.3.1 The licensee seeking coordination shall determine the maximum pfd value at and beyond the border that could be produced by any single transmitting station of the WCS system. In making this determination (calculation) the licensee shall use good engineering practice and generally accepted terrain-sensitive propagation models. The licensee shall disclose, upon request by the Administration, all data and calculations used in determining compliance with this Arrangement.
 - 3.3.2 The recipient of the coordination proposal must respond by registered mail (or other mutually acceptable method) within 30 days of receipt to indicate any objection to deployment of the proposed facilities. If no objection is raised within that timeframe, then deployment of facilities may proceed.
 - 3.3.3 If an objection is raised by the recipient of the coordination proposal, licensees must work in collaboration to develop a mutually acceptable solution to the potential interference problem. It is expected that the time from the date of the objection to develop and reach agreement on such a solution should not exceed 30 days.
 - 3.3.4 In the event that a mutually acceptable agreement cannot be concluded between licensees, then the licensee seeking coordination may ask its Administration to

³ In cases where both the US/Canada border and the neighboring service area lie within a body of water, the power flux-density value shall be calculated at the shoreline of the neighboring service area.

facilitate resolution of the case with the other Administration. A station that requires coordination shall not be placed in operation until an agreement has been reached or until both Administrations concur and authorization by the appropriate Administration has been provided.

- 3.3.5 If there is no licensee on the opposite side of the border, any station of the proposed system shall not produce a pfd at or beyond the border that exceeds -110 dB(W/m²) in any 1 MHz bandwidth. Exceeding the pfd in this case would require the agreement of both Administrations.
- 3.4 Any WCS station will require further coordination if proposed modifications would:
- (a) result in the pfd at or beyond the border exceeding -110 dB(W/m²) in any 1 MHz bandwidth;
 - (b) involve operation on frequencies not previously coordinated; or
 - (c) change the polarization.

4. Coordination with Existing Fixed Microwave Stations

- 4.1 Licensees of WCS systems with stations located within 120 km of existing fixed microwave stations that have been authorized by the other Administration prior to the date of this Arrangement are required to coordinate with licensees of such fixed microwave stations if the WCS station would produce a pfd exceeding - 110 dB(W/m²) in any 1 MHz bandwidth at or beyond the border (see Annex A).
- 4.2 Such coordination shall be based on:
- A technical analysis showing that interference is not caused to existing fixed microwave operations of the other Administration. The analysis shall be based on recognized industry procedures such as TIA/EIA Telecommunications Bulletin (TSB10-F), “Interference Criteria for Microwave Systems”;
 - or
 - Alternatively, a mutually acceptable arrangement between the applicant/operator of the WCS facility and the affected fixed microwave operator(s).
- 4.3 In the event that a WCS station causes interference to an existing fixed microwave station located at a distance greater than 120 km from a WCS station, both Administrations agree to take immediate, appropriate steps to resolve such interference.
- 4.4 Administrations that have authorized fixed microwave stations will take steps to include a transition process through domestic policy that will facilitate the introduction of WCS in both countries.

5. Information exchange

- 5.1 The Administrations will exchange licensee names, their licensed areas and points of contact to allow the licensees to contact the relevant licensee(s) on the other side of the border in order to facilitate licensee-to-licensee coordination in accordance with this Arrangement.
- 5.2 To facilitate cross-border coordination between licensees, the licensees are encouraged to exchange data as listed in Annex B to this Arrangement.

Annex A

List of Canadian Fixed Microwave Receive Stations Located Within 120 km of the Canada/US Border

Call Sign	Channel/ Frequency (MHz)	Location	Province	Latitude	Longitude	Emission	Pol	ERP (dBw)	Azimuth (Degrees)	Antenna Height (m)	Ground Eleva- tion (m)
XMZ276	2311	Annapolis	Nova Scotia	44 48 59	65 26 11	6M00G7WDT	V	24	78.6	71	234
CGE988	2305	Den Hill	New Brunswick	45 50 32	66 00 53	6M00G7WDT	H	22.3	93.8	60	102
CGE936	2317	Saint John	New Brunswick	45 16 19	66 03 46	6M00G7WDT	H	24.9	39	80	20
CGE936	2305	Saint John	New Brunswick	45 16 19	66 03 46	6M00G7WDT	V	30.9	31.2	84	20
CJX569	2311	St George	New Brunswick	45 10 15	66 54 30	6M00G7WDT	H	22.9	273.1	75	198
VBB781	2311	Lac Lavoie	Quebec	47 17 14	70 39 23	6M00G7WDT	H	27.9	223.1	19	742
VBB781	2311	Lac Lavoie	Quebec	47 17 14	70 39 23	6M00G7WDT	H	34.4	34.6	19	742
VES838	2305	St Joseph	Quebec	46 19 25	70 51 00	6M00G7WDT	H	21.9	320.6	25	304
VES838	2311	St Joseph	Quebec	46 19 25	70 51 00	6M00G7WDT	H	23	156.8	50	304
XMO401	2311	Québec	Quebec	46 48 29	71 13 04	6M00G7WDT	H	35	142.4	135	90
XMO401	2305	Québec	Quebec	46 48 29	71 13 04	6M00G7WDT	V	28.8	34.9	135	90
VES848	2305	Pontbriand	Quebec	46 09 55	71 14 25	6M00G7WDT	V	31	90.9	30	640
XMM975	2311	Mont Bélair	Quebec	46 49 22	71 29 43	6M00G7WDT	V	38	22.3	27	483
XOJ435	2317	Nicolet	Quebec	46 04 52	72 15 12	6M00G7WDT	H	36.3	144	70	100
XOJ435	2317	Nicolet	Quebec	46 04 52	72 15 12	6M00G7WDT	V	22.8	89.3	65	100
CGE493	2305	Sainte Eulalie	Quebec	46 05 13	72 15 13	6M00G7WDT	H	26.7	222	82	106
VBB710	2317	Mont Brôme	Quebec	45 17 20	72 38 21	6M10G7WXT	V	28.7	323.3	31	544
VAF221	2305	Saint Ours	Quebec	45 53 37	73 08 14	6M00G7WDT	V	26.6	303.4	50	21
XOJ678	2317	Joliette	Quebec	46 01 25	73 25 24	6M10G7WXT	H	24.1	279.3	25	58
CGE491	2305	Saint Andre Est	Quebec	45 33 25	74 18 45	6M00G9WDT	H	29.2	133.8	45	130
XKU532	2305	Bourget	Ontario	45 27 48	75 09 46	6M00G7WDT	V	26.5	82.5	82	50
XKU532	2311	Bourget	Ontario	45 27 48	75 09 46	6M00G7WDT	H	21.6	210.2	82	50
XKU584	2317	Peterborough	Ontario	44 19 45	78 18 03	5M00D7WDT	H	30	259	67	213
XKU576	2305	Edgar	Ontario	44 31 52	79 39 33	6M00G9WDT	H	24.4	188.9	33	419
XKU588	2311	Guelph	Ontario	43 35 49	80 17 09	6M00G7WDT	H	27.2	16.8	120	359
VAD462	2311	London	Ontario	43 02 12	81 15 15	6M00G7WDT	H	24.2	205.9	49	250
VBE697	2311	Elliot Lake	Ontario	46 22 52	82 39 10	6M00G7WDT	V	27.3	159.9	52	378
VAM463	2311	Morden	Manitoba	49 11 03	98 00 36	6M00G7WDT	V	25	68.2	102	282
VBJ424	2305	Midale	Saskatchewan	49 22 41	103 23 10	6M00G7WDT	V	32.8	129.4	46	576
VBJ422	2305	Milestone	Saskatchewan	50 00 08	104 31 57	6M00G7WDT	H	33.9	129.3	120	576
VEZ625	2305	Medicine Hat	Alberta	50 02 24	110 37 11	6M00G7WDT	V	26.8	241	54	744
VEZ687	2305	Grassy Lake	Alberta	49 50 31	111 37 48	6M00G7WDT	H	31.1	254.2	75	805
VEZ687	2311	Grassy Lake	Alberta	49 50 31	111 37 48	6M00G7WDT	V	26.8	83.6	88	805

**List of Canadian Fixed Microwave Receive Stations Located Within
120 km of the Canada/US Border (cont'd)**

Call Sign	Channel/ Frequency (MHz)	Location	Province	Latitude	Longitude	Emission	Pol	ERP (dBw)	Azimuth (Degrees)	Antenna Height (m)	Ground Eleva- tion (m)
VCU915	2305	Mount Midgeley	British Columbia	49 09 56	116 40 39	6M00G7WDT	V	24.7	347	38	1738
VCU994	2317	Big White	British Columbia	49 43 34	118 56 12	6M00G7WDT	V	25.3	302.6	32	2000
VBG834	2305	Kelowna	British Columbia	49 53 03	119 29 12	6M00G7WDT	V	28.5	339.9	60	350
XLB876	2317	Campbell Mountain	British Columbia	49 30 18	119 32 43	6M00G7WDT	V	28.7	195.9	15	843
VBI998	2305	Mt Kobau	British Columbia	49 08 10	119 40 08	6M00G7WDT	H	25.4	315.7	10	1862
VBI998	2311	Mt Kobau	British Columbia	49 08 10	119 40 08	6M00G7WDT	V	24.6	327	8	1862
CFR275	2311	The Wart	British Columbia	49 54 10	120 22 36	6M00G7WDT	V	23.8	349.3	29	1725
VBI708	2317	Agassiz	British Columbia	49 15 00	121 44 48	6M00G7WDT	H	27.8	216.9	40	280
VBI698	2305	Harrisson	British Columbia	49 17 38	121 46 35	6M00G7WDT	H	29.1	194	15	40
CGE817	2305	Surrey	British Columbia	49 11 09	122 51 02	6M00G7WDT	H	20.6	133.3	70	87
CGE892	2305	Black Tusk	British Columbia	49 59 05	123 03 22	5M00G7WDT	H	27.6	17.9	8	1888
CGE892	2317	Black Tusk	British Columbia	49 59 05	123 03 22	6M00G7WDT	V	24.2	25.6	10	1888
CGE892	2317	Black Tusk	British Columbia	49 59 05	123 03 22	6M00G7WDT	V	19.4	25.6	80	1888
CFG241	2305	Pender Harbour	British Columbia	49 36 55	124 00 12	6M00G7WDT	V	24.3	308.9	27	457
VBW902	2305	Mt. Horne	British Columbia	49 17 22	124 42 08	10M0G7WDT	H	27.7	232.7	25	594
VBW938	2305	Mt. Ozzard	British Columbia	48 57 34	125 29 30	10M0G7WDT	V	22.7	305.2	8	660

Annex B

Parameters for Coordination

List of parameters that should be provided:

Licensee information (Corporate name/Mailing address/Phone/Fax);
Location of transmitter (Community/State/Province);
Geographical coordinates of transmitting antenna;
EIRP (dBW);
Ground elevation and antenna height above ground (m);
Centre frequency (MHz);
Polarization;
Antenna pattern/tabulation of the pattern;
Azimuth of the maximum antenna gain;
Bandwidth and emission designation(s).

Notes:

1. These parameters are for the coordination of the base station and subscriber stations.
2. The licensee could provide more parameters, if needed, for the coordination process.